

## COA Development

LtCol Andrew R. Kennedy

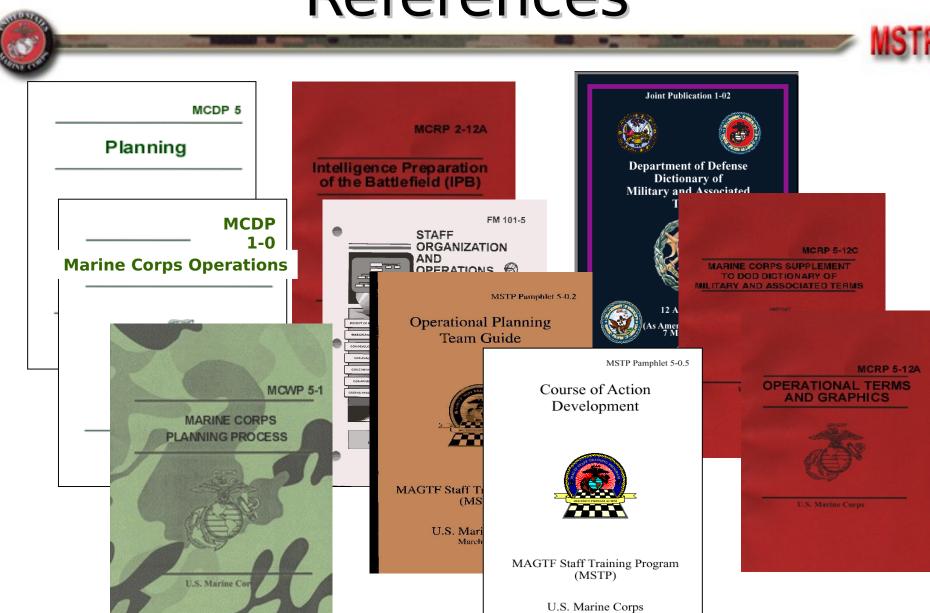
#### Purpose





- Understand COA Development
- Understand how to develop a COA
- Understand how to record and articulate a COA

#### References



November 2001

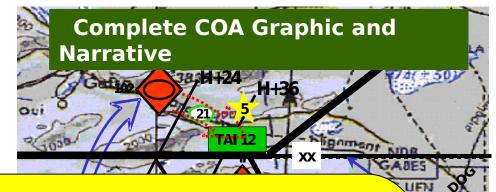
#### What Is A COA?





...Broadly stated potential solution to an assigned mission

war



 Ger Seek an asymmetric advantage over for the enemy

Focus on the decisive action and how the shaping actions support the decisive action and

MCDP 1

## COA Development



#### MSTP

Staff

**Estimates** 

#### <u>Process</u>:

- Develop initial COAs
- Commander's input
- COA refinement
  - Graphic & Narrative
- COA criteria
  - Suitable
  - Distinguishable
  - Feasible
  - Acceptable
  - Complete

#### e

#### Input:

- Mission Statement
- Refined intent
- Planning guidance

#### Output:

- Designated COAs for war game
- War Game guidance
- Evaluation criteria

**IPB** 

#### Operational Design **Visualize** escribe Battlefield Framework **Direct** Deep, Close, Rear (Single Battle) CBAE **Main Effort** Guidande Reserve **METT-T** Security Decisive/Shapi Warfighting Functions Sustainment **OPORD Integrated Planning** MEF **Battle Staff and OPT Functional** eptual The Planking **Hierarchy Execution**



## **COA Development Process**



- Review Situational Awareness
- Assess Operational Capabilities
- Apply the Battlefield Framework
- Develop Supporting Concepts
- Plan for Assessment



### TTP For COA Development





•	COA	Deve	lopment

- Update Intel and IPB / Use IPB Products / Use Red Cell
- **Review SA** Review Commander's Operational Design / CBAE / Guidance
  - **Display Friendly Forces**
  - Assess Relative Combat Power
  - Review COGs/CVs
- Operational Review Essential Tasks
- Capabilities Develop Initial COAs in Concert With Cmdr's Intent and Planning Guidance:
  - Forms of Maneuver
  - Initial or "Rough Cut" COA "discussion" to CG / Battle staff
  - Develop COAs
    - Array your Forces
    - Delineate Battlespace
    - Synchronize Actions
  - Develop Supporting Concepts Intel, Fires, & Log
  - Plan for Assessment
  - Complete COA Narrative/Sketch

**Assess** 

**Apply** 

**Battlefield** 

Framework

**Supporting Concepts** Assessment

FIGHT AS A MAGTF -- Not as a separate GCE, ACE, and

#### ORIENT ON THE ENEMY





### We should see the enemy as he sees himself

MCDP 1

- Capabilities
  - Strengths
  - Weaknesses
- Doctrine
- Tactics, techniques, and procedures
- Current intelligence



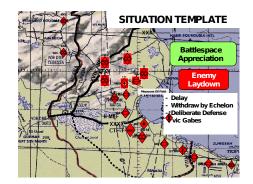
## Update Intel & IPB

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MSTF

- Intelligence Update--
  - Refined and Prioritized Threat COAs
    - Enemy Most Likely and Most Dangerous COAs
    - High Value Target List





- Initial Event Template





Focus IPB and Intelligence products based on HVTs and how you think the enemy will fight



## Review Approved Mission Statement



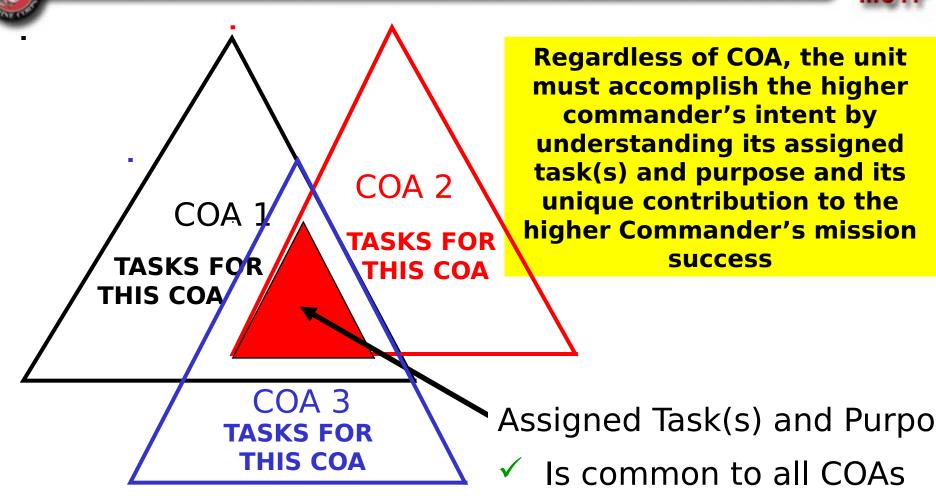


 On order, II MEF attacks in zone to defeat the 1st tactical echelon in order to prevent the 1st tactical echelon from attacking the JTF main effort's eastern flank

## Assigned Tasks & Purpose







## REVIEW CBAE AND PLANNING GUIDANCE

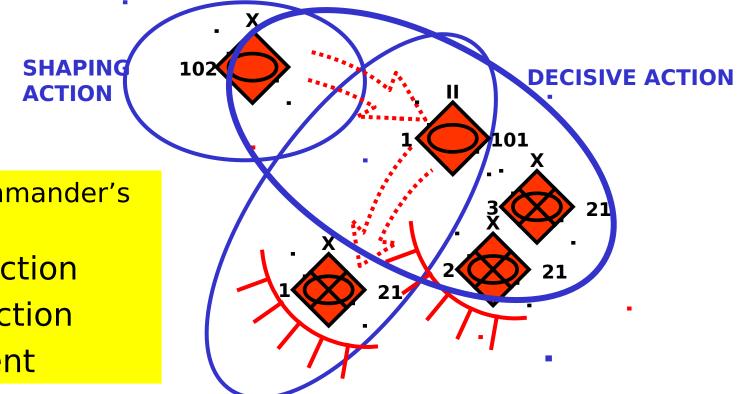


s the commander translate

Operational Design helps the commander translate operational requirements into tactical guidance

SHAPING ACTION

**MCDP 1-0** 



CBAE and Commander's vision of:

- Decisive Action
- Shaping Action
- Sustainment





Commander's Vision of Decisive Action, Shaping Action, and Sustainment

#### COMMANDER'S INTENT

- PURPOSE: To prevent the 1st tactical echelon from attacking the JTF main effort's eastern flank.
- METHOD: In this case purposely left blank
- ENDSTATE: Enemy's first tactical echelon defeated- 102d Armored Bde committed to reinforce first tactical echelon. Once committed I want them defeated.





Commander's Vision of Decisive Action, Shaping Action, and Sustainment

- COG: Enemy's tactical strength are his mobile reserves.
   They cannot be committed in a decisive manner. Our COG is combined arms— use decisively against the enemy CV.
- BATTLESPACE: The enemy will maximize obstacles and terrain to fix our forces, then exploit with fires and mobile counterattack forces. Maximize use of our aviation as well as JFACC assets in our deep operations. I am concerned about enemy units penetrating the eastern flank as well as reinforcing from the north. Maximize use of theater collection assets to identify and monitor these enemy units.

#### CCIRs:

- How long will it take the 102d Armored Brigade to reinforce the 1st Tactical Echelon?
- Can the 2nd and 3rd armored battalions of the 101st Armored Brigade reinforce enemy forces in our AO prior between H-24 to H+24?



Commander's Vision of Decisive Action, Shaping Action, and Sustainment

- GUIDANCE: To support the JFC's plan, we must keep the 102d Armored Bde from committing against the ME or being used decisively against us.
  - I want to shape the enemy by having him first commit his reserve armor battalion. Simultaneously, by using lethal and non-lethal fires, I want to control the timeline for the commitment of the enemy's reserve Armored brigade and, once committed against my forces, I want to disrupt his capability to maneuver.
  - These shaping actions will allow me to fix the Avoid the enemy's
    fixed defenses IOT defeat the mechanized brigades and focus enemy
    reserves while we mass combat power at the time and place of our
    choosing. the decisive action against the 102d Armored Bde. Once
    defeated, rapidly switch focus to the defeat of his remaining
    mechanized and reserve units.
  - Security: Place a viable security force on the flank of the ME.
  - Sustainment: Task organized and positioned forward to maintain momentum.

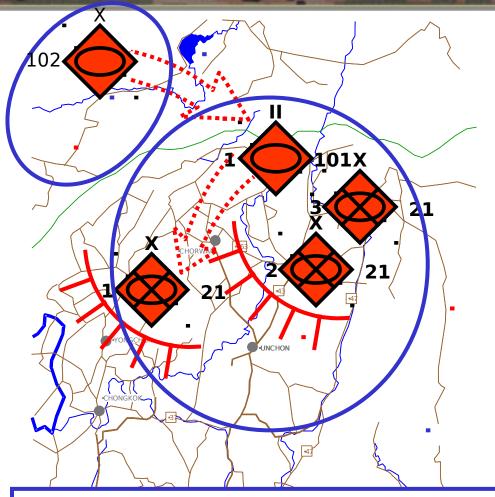
## Review CBAE And Planning



Guidance

MST

I see the enemy's tactical strength as his mobile reserves. I cannot let the enemy commit these reserves in a decisive manner. To support the higher commander's plan, I will have to keep the reserve armored brigade from committing against our higher commander's main effort or being used decisively against my forces.



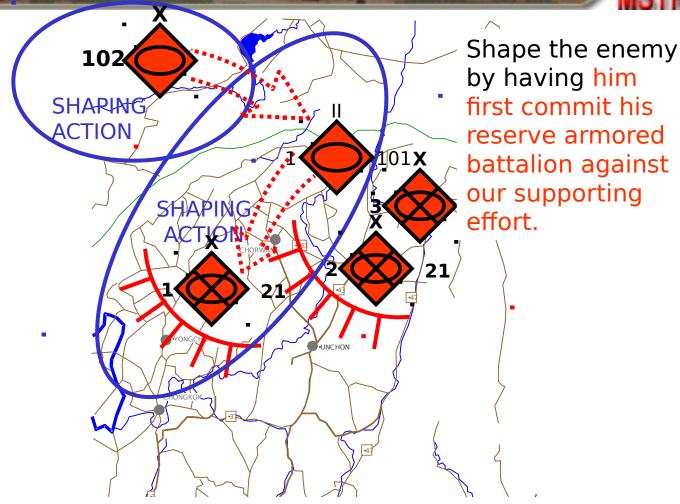
The purpose of this operation is to prevent the 1<sup>st</sup> tactical echelon from attacking the JTF main effort's eastern flank.

#### Review CBAE And Planning

Guidance

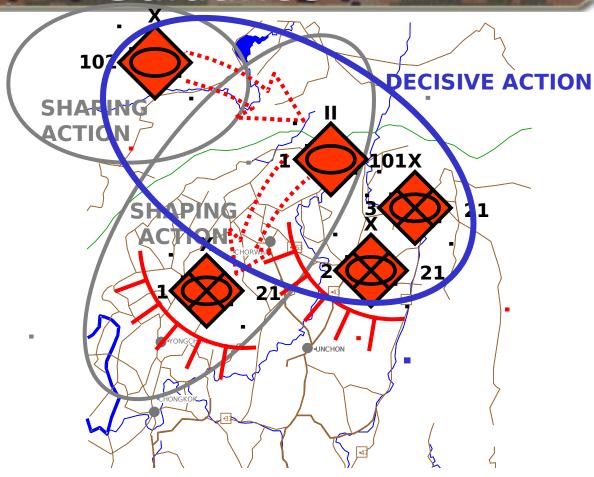
MST

Simultaneously, by using lethal and non-lethal fires, we will control the timeline for the commitment of the enemy's reserve armored brigade and, once committed against usdisrupt his capability to maneuver.



These shaping actions will fix the enemy reserves while we mass our combat power at the time and place of our choosing.



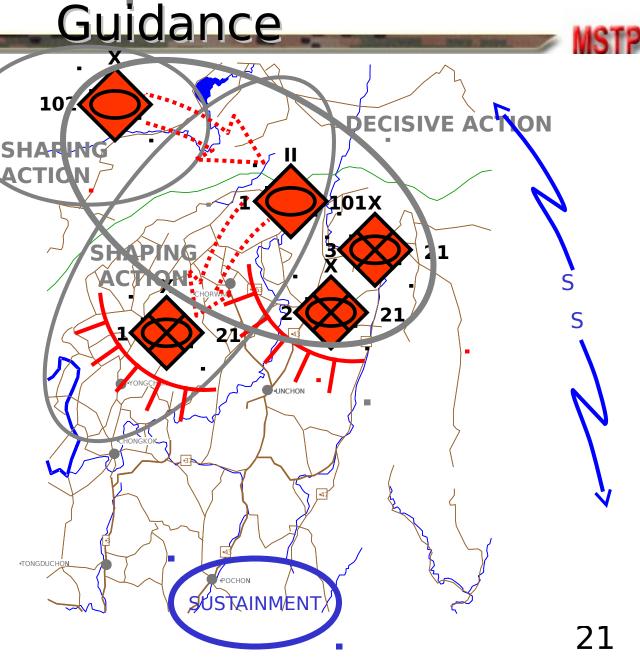


Exploit our tactical center of gravity- combined arms. Avoid the enemy's fixed defenses to defeat the mechanized brigades and focus the decisive action against the 102d Armored Bde.

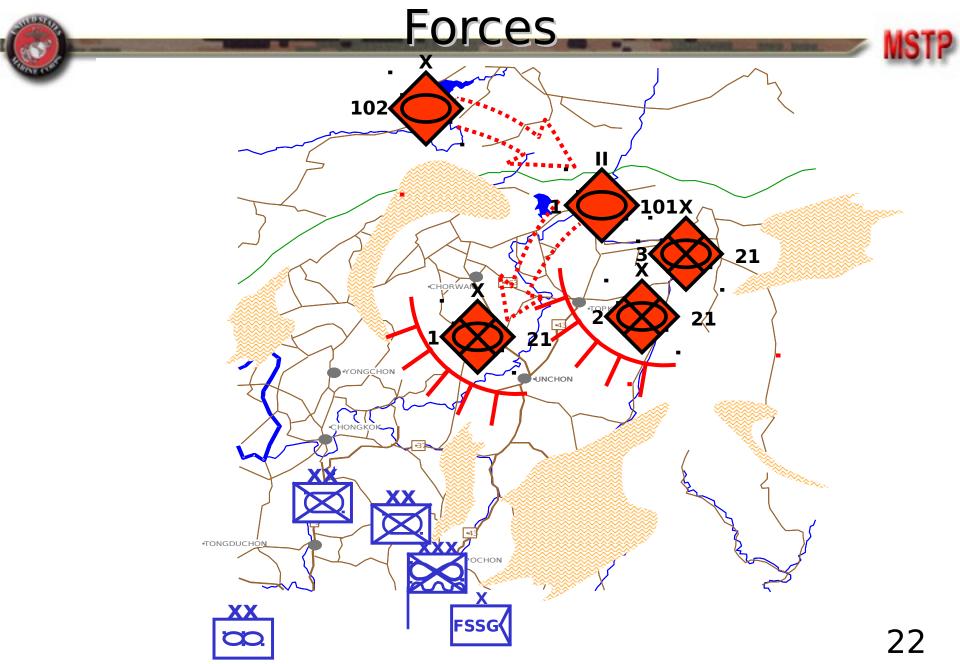
## Review CBAE And Planning

Place a viable security force on the flank of the main effort.

Task organize the sustainment and position it forward to allow the force to maintain operational momentum."



### Display Friendly And Enemy



### TTP For COA Development



Assess



- COA Development
  - Update Intel and IPB / Use IPB Products / Use Red Cell
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FIGHT AS A MAGTF -- Not as a separate GCE, ACE, and

## **Enemy Center Of Gravity**

MSTP

COG analysis, based on expected enemy COA, helps the commander and staff orient on the enemy. It provides a framework from which to identify enemy HVTs and subsequent HPTs

#### **CENTER OF GRAVITY**

**102 Armored Bde** 



#### **CRITICAL VULNERABILITIES**

**C2 Vulnerable To Attack And Neutralization** 

**Inadequate Air Defense** 

Logistics

Wireless Communications System Vulnerable To Electronic Attack And Physical Destruction

#### **HIGH-VALUE TARGET (HVT)**

Assets that the enemy commander requires for the successful completion of a specific course of action



#### **HIGH-PAYOFF TARGET (HPT)**

A target whose loss to the enemy will contribute to the success of the friendly

Some become HPTs of action

### Friendly Center Of Gravity





#### **CENTER OF GRAVITY**

#### **CRITICAL VULNERABILITIES**





Heavily dependent on fuel

SPODs vulnerable

Command and Control



Use Decisively and Protect Friendly CVs

## Relative Combat Power Assessment



MSTP

Macro Elements of Combat Power: Equipment and Organizations

O' gamzations				
<b>EQUIPMENT</b>	MEL	-	IAEIAI I	REMARKS
TANKS	116		143	+ QUAL/READINESS/TGT SYSTEM
ARTY	108		<b>150</b>	+ ACCURACY/MASS/AMMO/QUANTITY
240MM MORT	0		24	- QUANTITY
<b>ARMORED INF VEH</b>	504	1	L <b>44</b>	+ QUAL/READINESS/TGT SYSTEM
<u>UNITS</u>				
TANK BNS	2		3	+ QUAL/READINESS/TGT SYSTEM
INF BNS MOBILITY		1	8	9 + QUAL/READINESS/QUANTITY &
<u>AIRCRAFT</u>				Relative Combat Power Assessment
F/A-18	36		• Allow	ws the commander to compare his forces
AV-8B	32		to th	e enemy force.
AH-1W	36		the	ws the commander to resource and size e according to assigned tasks

## Relative Combat Power <u>Assessment</u>





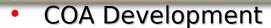
#### **102d ARMORED BRIGADE**

LEADERSHIP	GOOD	** Senior officers well educated and formally trained in the operational art
		** Experienced junior officers and NCOs
		**Excellent cohesion and esprit
MORALE	HIGH	** Well equipped
		** Troops have demonstrated discipline in recent engagements
TRAINING	MARGINAL	** Usually fights as independent brigades. Not experienced in conducting and controlling multibrigade combined arms operations

**INTANGIBLE FACTORS -- What does it all mean?** 

### TTP For COA Development





- Update Intel and IPB / Use IPB Products / Use Red Cell
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**Assess** 

- Review COGs/CVs
- Operational Review Essential Tasks
- Capabilities
- Develop Initial COAs in Concert With Cmdr's Intent and Planning Guidance:
  - Forms of Maneuver

Apply Battlefield Framework

- Initial or "Rough Cut" COA "discussion" to CG / Battle staff
- Develop COAs
  - Array your Forces
  - Delineate Battlespace
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- Develop Supporting Concepts Intel, Fires, & Log
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## Use The Battlefield



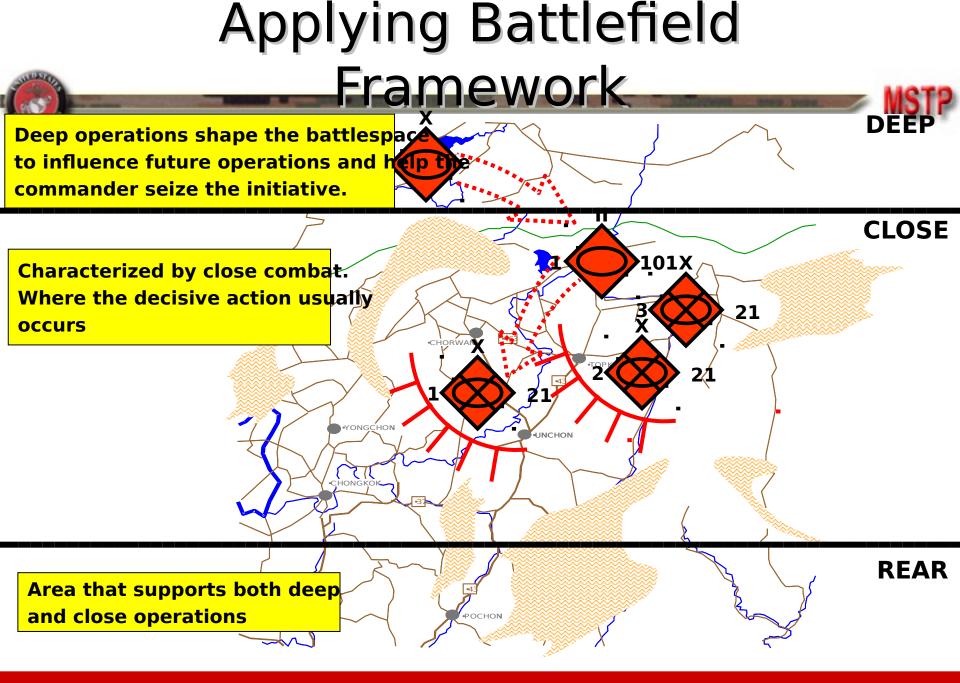
## Framework

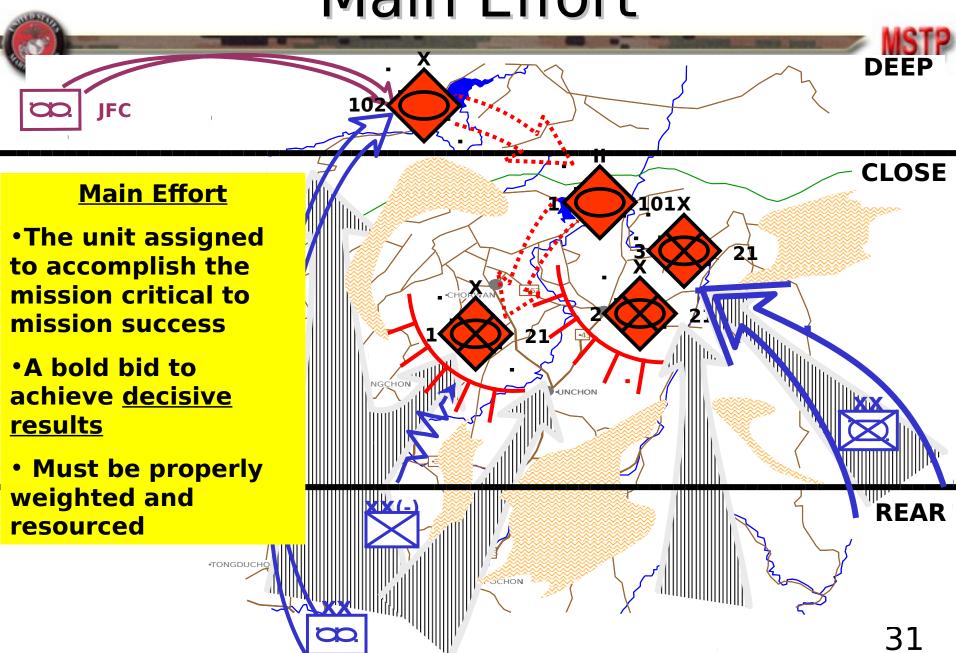


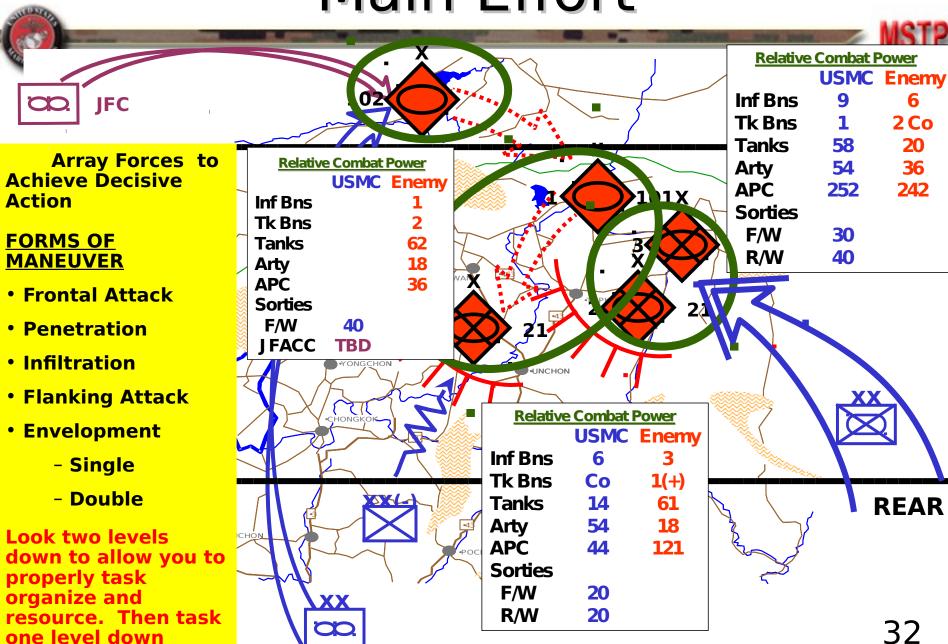
Describes how the commander will organize his battlespace and his forces to achieve a decision

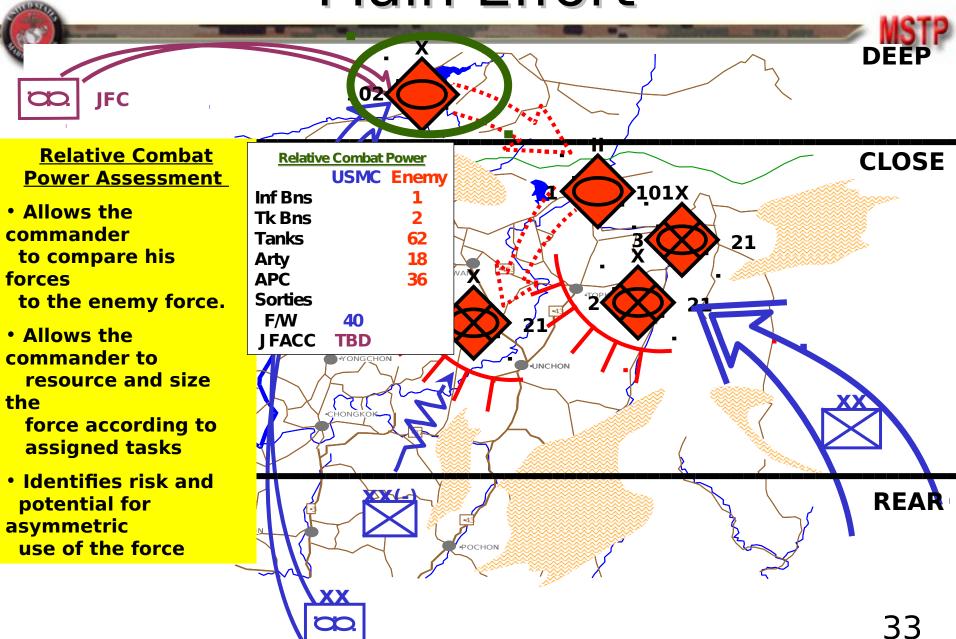
- Conceptual organization of the Battlespace
  - Deep
  - Close
  - Rear
- Organization of the Force into
  - Main Effort
  - Supporting Effort
  - Reserve
  - Security
  - Sustainment

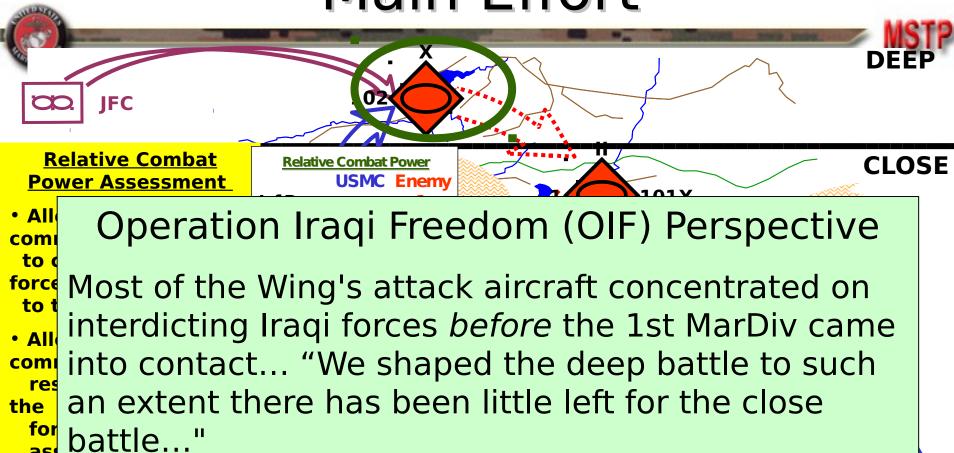
MCDP 1-0











3d MAW Planner

•POCHON

asymmetric use of the force

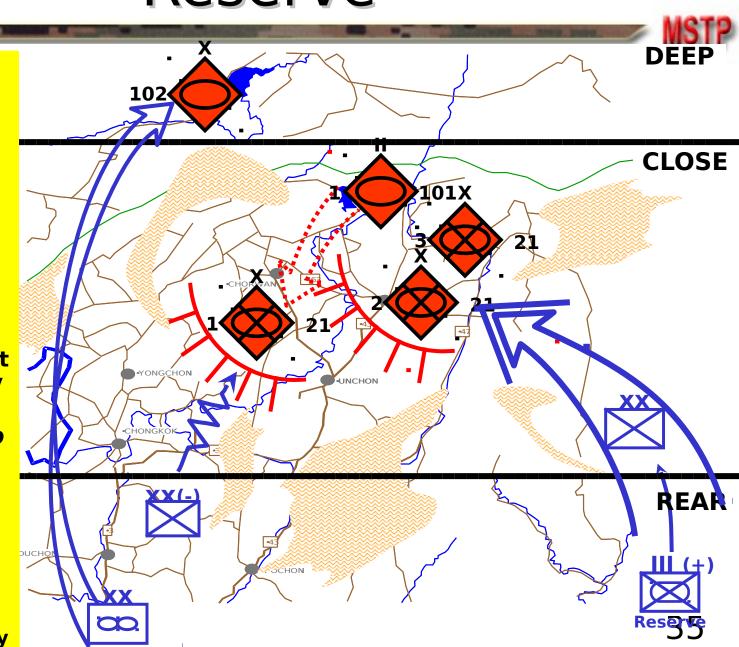
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#### Reserve

- Combat power initially withheld from action IOT deal with emerging opportunities
- -Essential tool used to exploit success
- -Must have superior mobility and combat power to the most dangerous enemy ground threat

#### TASKS ASSIGNED TO THE RESERVE

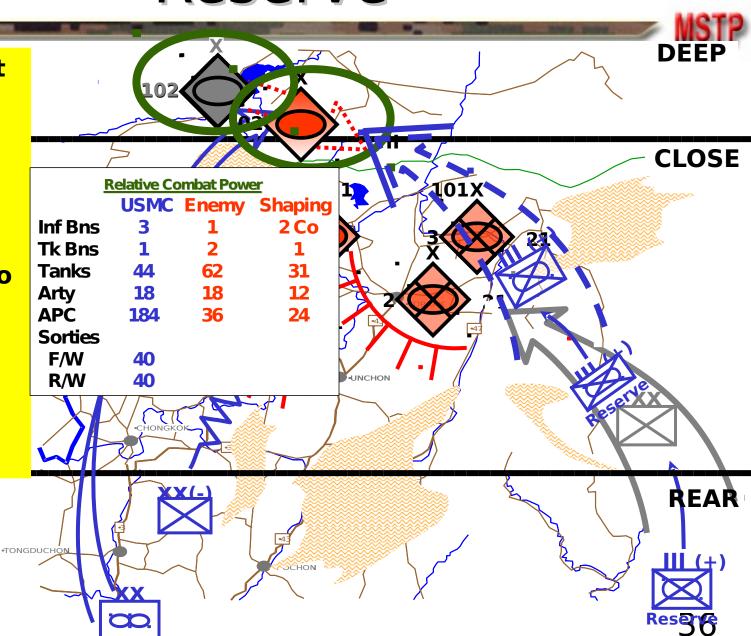
- Restore momentum to a stalled attack
- -Defeat enemy counterattacks
- -Exploit success
- When committed, the reserve normally



#### Reserve

A reserve must have mobility equal to or greater than the most dangerous enemy ground threat and it must be able to fight the most dangerous enemy ground threat

**MCDP 1-0** 



## Security

Security
Operations
protect the
Force from
surprise and
reduce
unknowns in any
situation

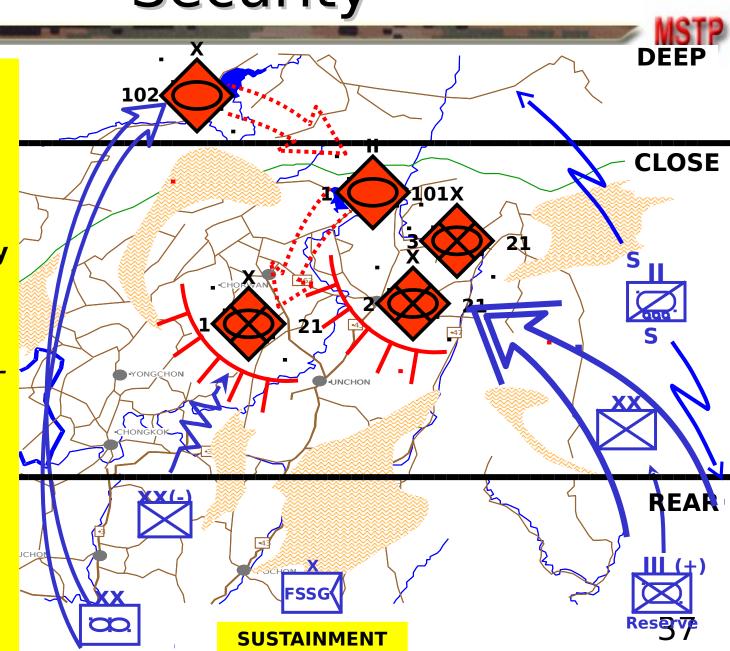
**MCDP 1-0** 

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SCREEN - Observe and reports

GUARD - Protect the main force by fighting to gain time

COVER - Operate apart from the main force to engage.



#### Sustainment





MAGTFs conducting expeditionary operations require sustainment that is responsive, flexible, and scalable to generate and sustain combat power

**MCDP 1-0** 

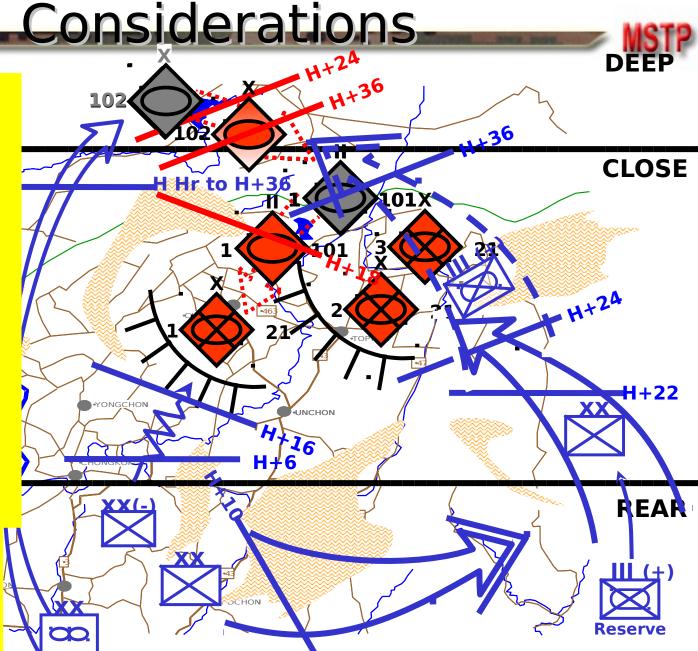
- Battlefield circulation
- Phasing of sustainment
- Priority of movement on MSR's
- Location and deconfliction of CSSAs/FARPs



# Synchronization



- Arrangement of military actions in time, space and purpose to produce maximum combat power at a decisive place and time.
- Under what conditions do you commit the main effort and exploit success with the reserves?
- Do you need to phase the operation?
- How long will the engagements take?
- What is the Enemy's

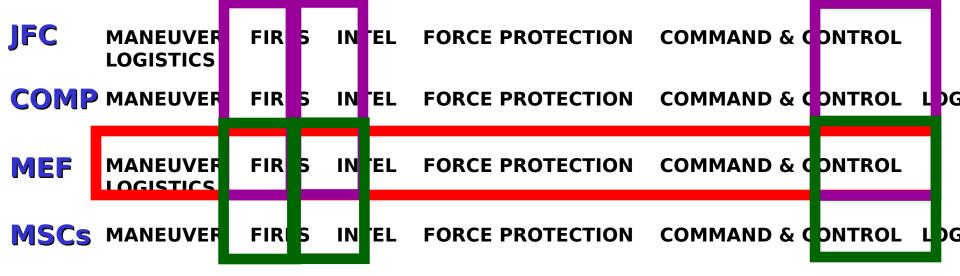




#### Synchronize The Force



Warfighting Functions Synchronize the Force

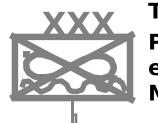


Synchronization begins in the development of the concept of operations and its nested supporting concepts

## **Aligning Concepts**







T: Defeat the 1<sup>st</sup> tactical echelon
P: Prevent the 1<sup>st</sup> tactical
echelon from attacking the JTF

**ME** eastern flank



T: ME, conduct flanking atk to defeat 2 mech bdes

P: Expose enemy's eastern flank and cause commitment of reserve Arm Bde

T: Screen E. Flank

P: Prevent En mvmt into

AO T: Fix Forward Mech Bde

P: Cause commitment of Enemy

Reserve armor bn



T: Disrupt 102d Arm Bde

P: Prevent 102d reinforcing

1st echelon and allow ME

to

maneuver to flank



T1: Defeat flank catk

by either mech bde

P1: Enable atk of main effort

T2: BPT, ME, defeat

102 Armored Bde

P2: Defeat of 1<sup>st</sup> echelon forces and protect flank of JTF

T: Conduct CSS Ops in support of

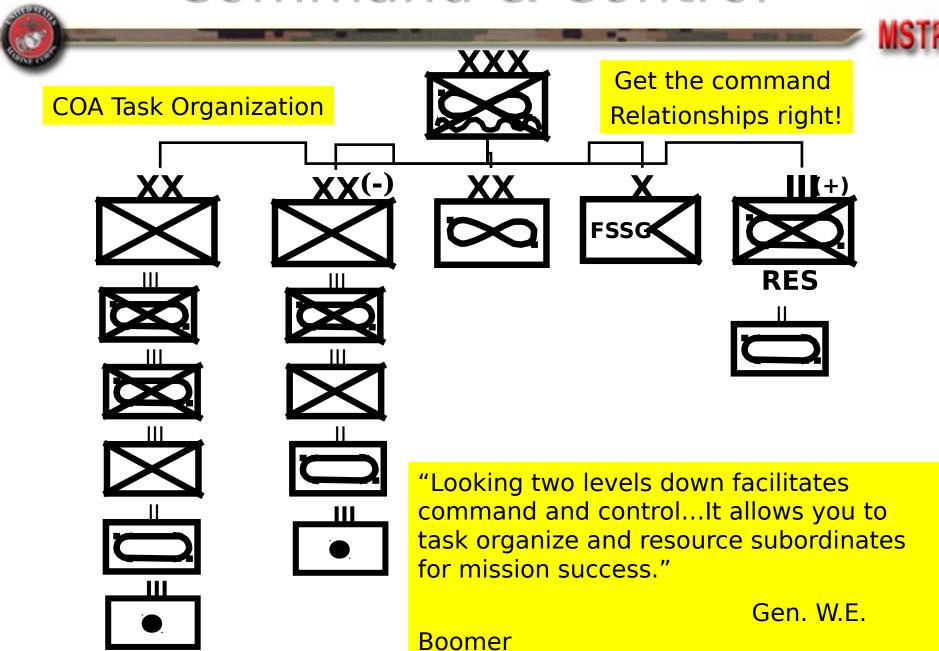
**FSSG** 

**MEF** 

P: Support defeat of 1st Tactical



#### Command & Control

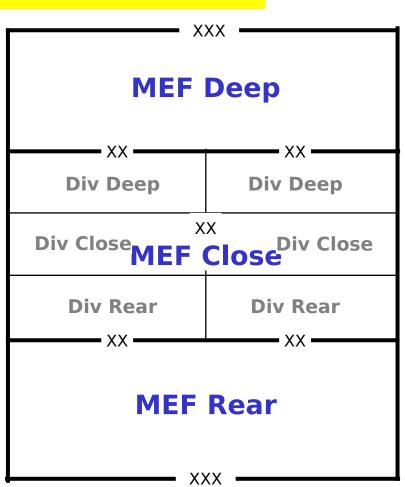






#### Control Measures facilitate Command and Control

- Delineate responsibilities
- Impose restrictions
- Provide coordination
- Decentralize execution
- Facilitate operations and tempo



Developed with a COA and tested in the War

Game

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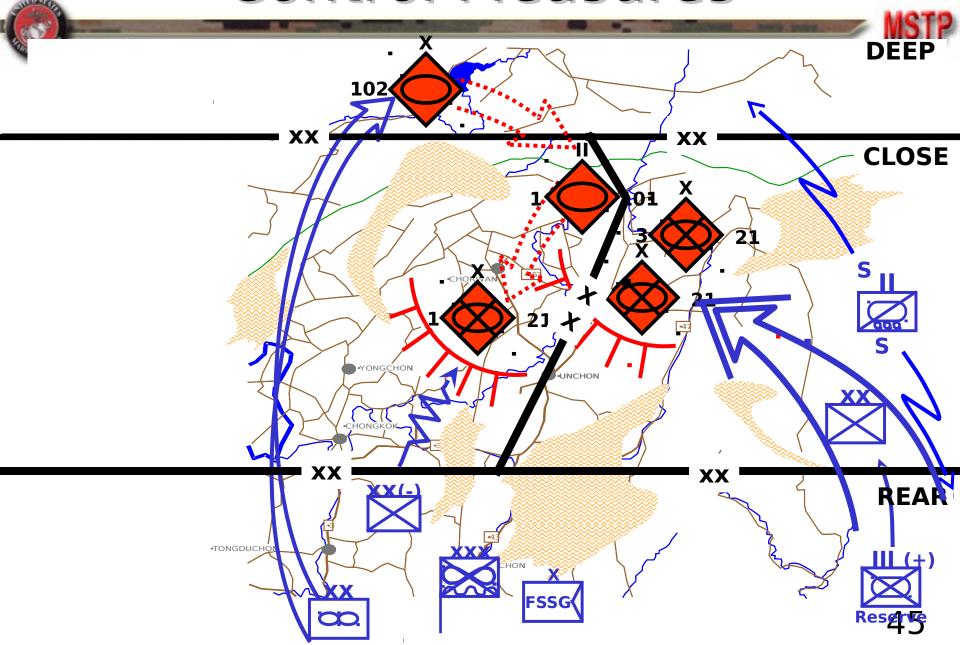
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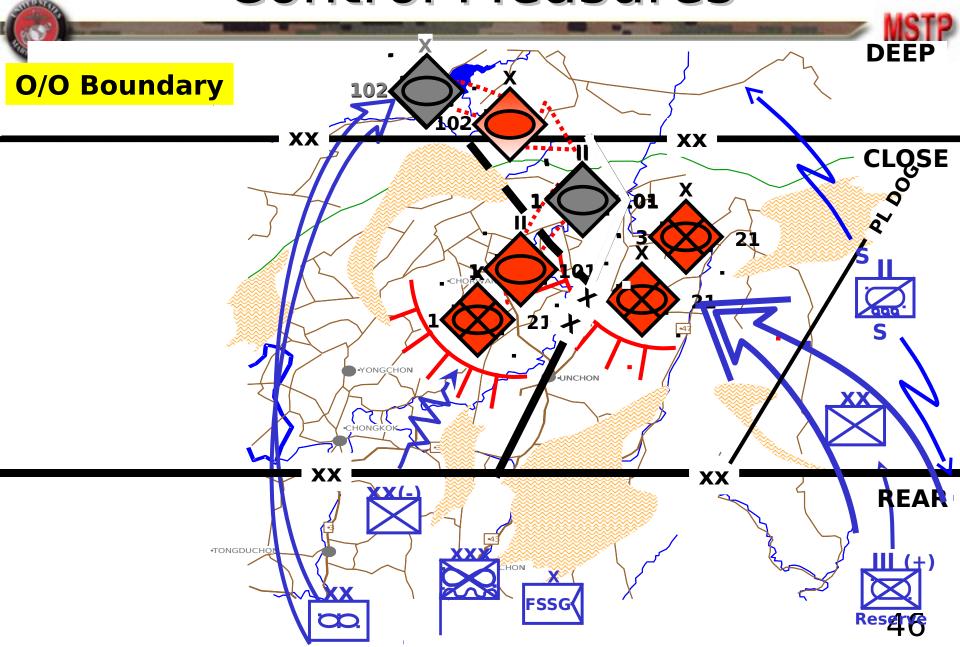
**DEEP** 

- Boundaries
- Time of Attack

XX XX **CLOSE**  Axis of Advance Direction of Attack 101 Limit of Advance Fire Support Coordination **Measures** XX REAR **Assign subordinates** battlespace so they can FSSG **MCDP 1-0** 

accomplish the mission and protect the force









#### Boundaries are our Friend!

# 3D ID AAR On Control Measures





#### Boundaries are our Friend!

- Boundaries became supremely important in the non-contiguous environment
  - No fratricide because fire supporters knew who owned the land
- FSCMs facilitated responsiveness..As long as maneuver commanders knew where the CFL was, we kept it tight

#### **COA** Criteria





- Suitability
  - Accomplishes the Mission
  - Complies with Commander's Guidance
- Feasibility
  - Time, Space, Resource Constraints
- Acceptability
  - Creates Advantage with Reasonable Cost in
- Distinguishability
  - Forms of Maneuver
  - Main Effort
  - Sequential vs Simultaneous
- Completeness
  - Accomplishes all Tasks
  - Accomplishes the Purpose

# Take Five!



#### TTP For COA Development





- Update Intel and IPB / Use IPB Products / Use Red Cell
- Review SA Review Commander's Operational Design / CBAE / Guidance
  - Display Friendly Forces
  - Assess Relative Combat Power

Assess

Review COGs/CVs

Apply

Review Essential Tasks

Battlefield - Develop Initial COAs in Concert With Cmdr's Intent and Framework Planning Guidance:

Operational

Forms of Maneuver

Capabilities -

- Initial or "Rough Cut" COA "discussion" to CG / Battle staff
- Develop COAs
  - Array your Forces
  - **Delineate Battlespace**
  - Synchronize Actions

**Supporting Concepts** 

- Develop Supporting Concepts Intel, Fires, & Log
- Plan for Assessment
- Complete COA Narrative/Sketch

FIGHT AS A MAGTF -- Not as a separate GCE, ACE, and

# Develop Supporting





Scheme of Maneuver is not enough for a complete COA!

- Concept of Operations
  - Concept of Intelligence
  - Concept of Fires
  - Concept of Support
  - Concept of IO

Do not develop supporting concepts in a vacuum



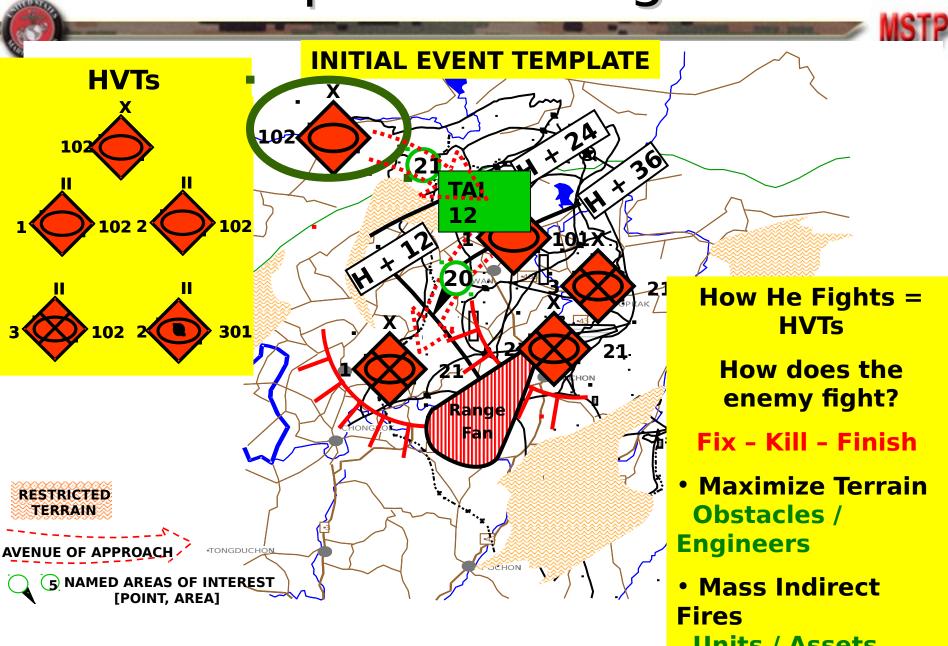
## **CONCEPT Of Intelligence**



- Collection Plan
- PIRS
- R&S PLAN



### Concept Of Intelligence

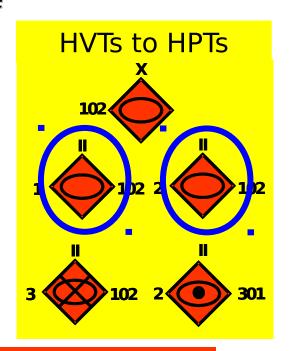


#### **CONCEPT OF FIRES**





- Review JFC Targeting Priorities
- Convert HVTs to HPTs:
  - Can collection assets acquire the HVT?
  - Can the HVT be successfully attacked?
  - Is the attack of the HVT necessary to the success of the friendly COA?
  - Is the HVT a critical node?
- ID HPTs within those formations / facilities
- Develop conditions/MOE (success)
- Allocate / request assets and plan to detect
- Integrate FS events or actions with maneuver planning and Intel



#### Concept Of Support





- Capabilities vs. requirements
- Phasing and shifting of priorities
- Battlefield circulation
- Prisoners of War handling
- Organization on the ground
- Potential displacements
- Planned operational pauses



### Other Concepts





#### **INFORMATION OPERATIONS**

#### Military Deception



OBJECTIVE: Enemy commander perceives the supporting attack to be the Main Effort and commits the Reserve Armored Battalion against the supporting attack

TARGET: 1st Tactical Echelon Commander

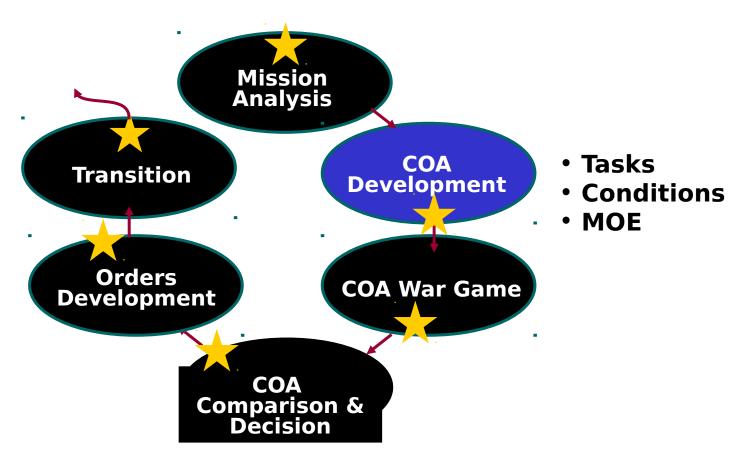
STORY: Main attack will occur in the West and the ME division is a follow and support force

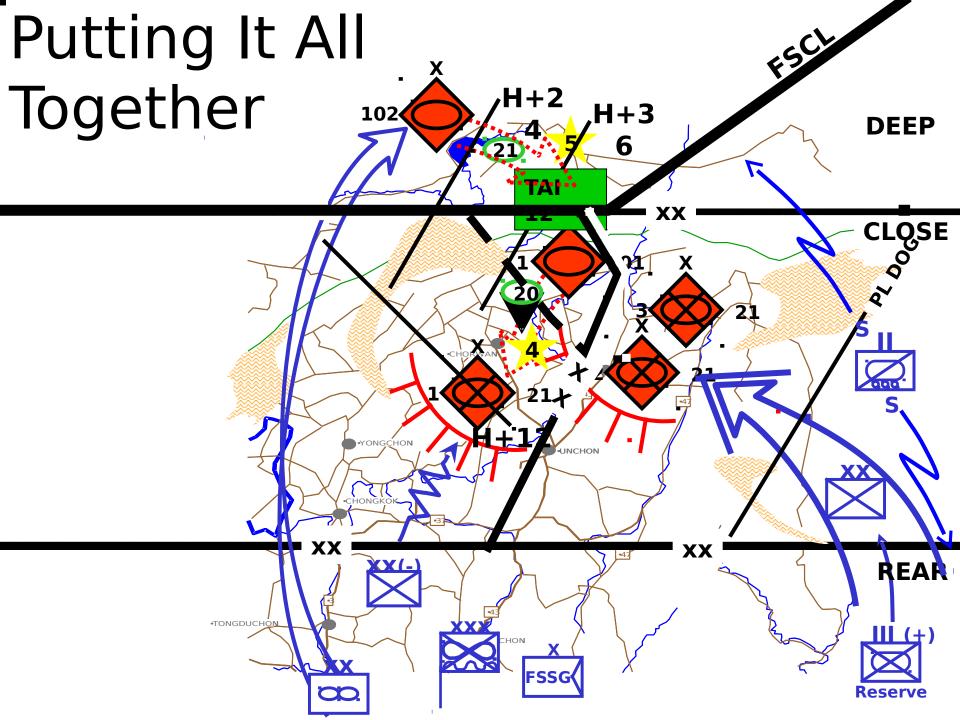
#### Assessment





#### Basis established in *PLANNING*





#### Recording & Articulating A

#### A Complete COA includes:

- Who: Task Organization
- What: Tasks for each unit
- Where: Delineation of Battlespace
- When: Time for designated activities to

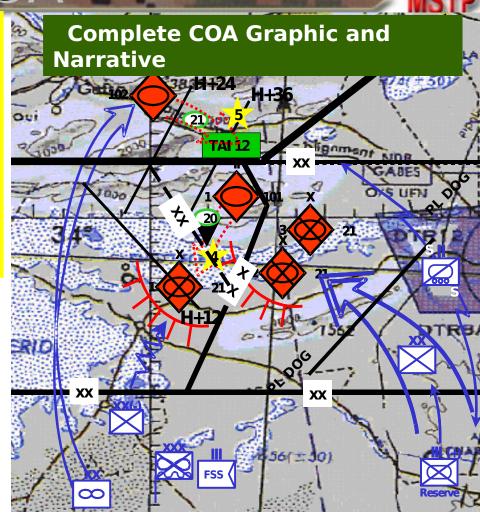
#### occur

- How: Method
- Why: Purpose

Jingie battie - Deep, Close, and

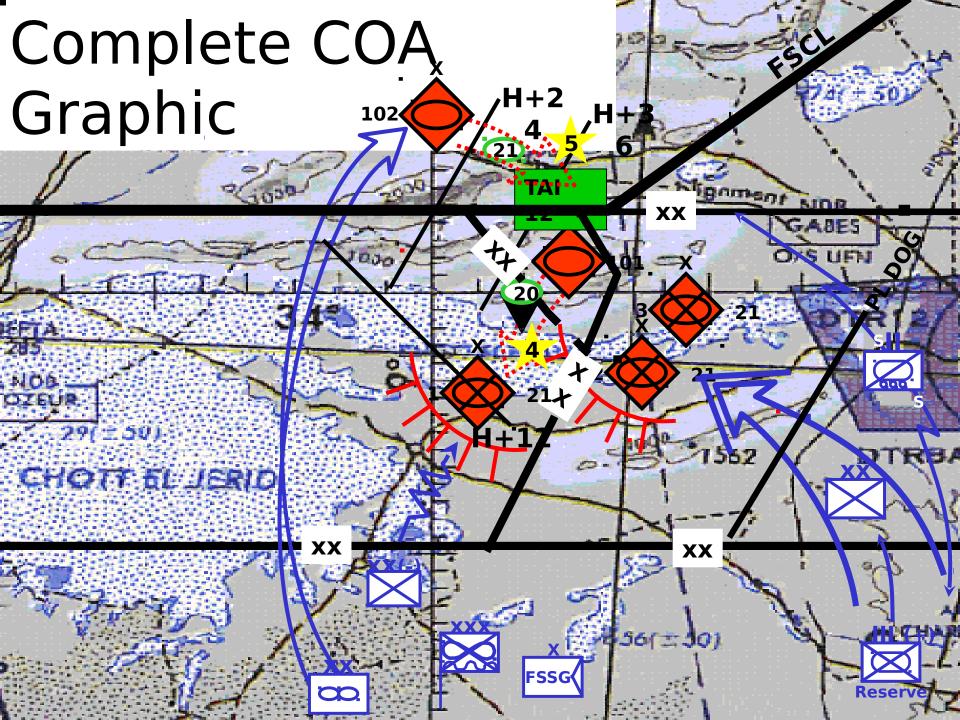
Rear Ops

- Main Effort
  - Supporting Effort / Attack
- Reserves
- Security
- Sustainment
- Control Measures
- Ground/Air Axis of Advance
- HQ Locations
- Assembly Areas
- ACE Bed-down sites and CSSAs
- Reconnaissance and Security Operations



A complete MEF Course of Action

Not just a GCE CONOPS



# Complete COA Narrative



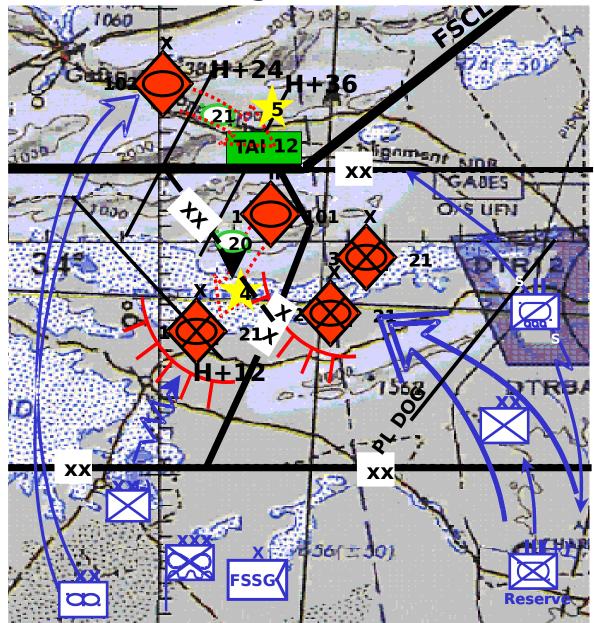
MSTP

On order the MEF attacks in zone to defeat the first echelon. Close Operations—In the west, a division (-) conducts a supporting attack to fix the 1-21st Mechanized Brigade and cause the commitment of the 1-101st Armor Battalion, the enemy reserve. To support this attack our deception effort will focus on portraying this supporting attack as our main effort. Upon the commitment of the 1-101st Armor Battalion, our main effort, consisting of a division, conducts a flanking attack through the gap between the 2-21st and 3-21st Mechanized Infantry brigades and defeats the 1-101st Armor Battalion. Fires will disrupt any movement of the 2-21st and 3-21st Mechanized Infantry Brigades and the enemy division's command and control. The *reserve* is a mechanized regiment (rein) that follows the main effort and is prepared to defeat a flank counterattack from either the 2-21st or 3-21st Mechanized Infantry Brigade. If not committed against the two mechanized brigades, O/O it will defeat the enemy operational reserve, the 102nd Armored Brigade. Deep Operations —The Wing disrupts the 102nd Armored Brigade from reinforcing the first echelon. Rear Operations—FSSG conducts CSS to support the main effort and conducts refuel on the move to maintain operational momentum. Security— Division screens the eastern flank.

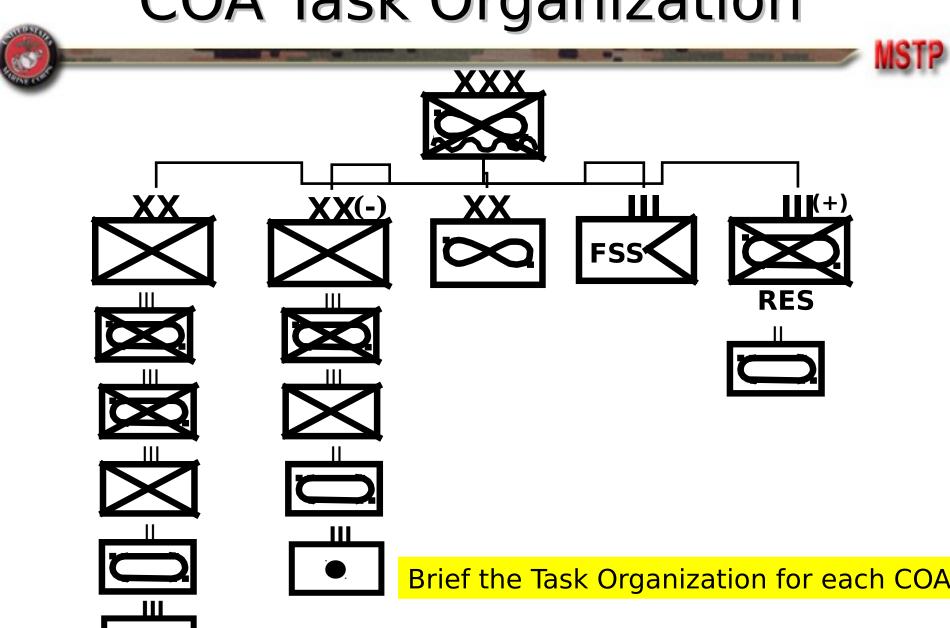
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# COA 1 Graphic & Narrative: Flanking Attack



## COA Task Organization



#### **COA Development Brief**





- Updated intel estimate
- Enemy most likely & most dangerous COAs
- Mission statement
- HHQ commander's intent
- Own commander's intent
- Commander's planning guidance
- Relative combat power assessment
- COA task organization
- COAs graphic and narrative
- Rationale for COAs
- Updated facts and assumptions



## Synchronization Matrix



Capture Critical Events for Wargaming

	Capt	tare critical E	vents for wargarring _	
TIME/EVENT		Pre H-Hr	H to H + 18	H + 18 to H + 36
<b>Enemy Action</b>		En in Position Def Fix	& defeat Sptng Atk -Rein with 101 Armo	日子 IDs ME / 102 Armd Bde Rein
DECISION PT.		Confirm EN COA	DP #4 - 101 Armor Bn Res Comm	it <b>£</b> P # 5 102 Armd Bde commit
MANEUVER	DEEP		ACE disrupts 102 Arm Bde	ACE SE disrupts 102 Arm Bd
	CLOSE	Counter Recon Sec Are	SE Div (-) fixes 1st Bde ME moves H	MB Div attacks 2 & 3 Bde
	RESERVE			Follows ME O/O defeat 102d Bo
	REAR			
	MOBILITY		MSR'S for Support to Main Effort	
	C-MOBILITY			
INTELLIGENCE			Recon in Zone TAI 12;NAI 21	
	NAI/TAI	DP #4 & 5 Active	NAI #20 - 101 Armor Bn moving	NAI #21 - 102d Bde moving
FIRES	LETHAL		ACE:disrupt 102º / Disrupt 301/302	<b>(DtyrBp</b> t 102 Arm Bde & Art
	NON-LETHAL		EW 101 Arm Bn to commit again	st SE
LOGISTICS	SUSTAINMENT	Est supply stockages	MCSSD'S with RCTs; est FARP per o	rder
	TRANSPORT	<b>Cndt Route Recon</b>		
COMMAND & CONTROL		Prep to shift ME	Prepare to Shift Main Effort	
INFO OPS		Deception Executio	<sup>n</sup> Disrupt 2d & 3d Mech Bdes C2 Nod	esDisrupt C2 Bn Level and above
FORCE PROTECTION		HVA Protected	C-Recon in Zone, C-Terrorism	Screen E. Flank
	NBC/AIR DEF	MOPP - 0		

# Recommendations For Wargaming





#### Wargaming Guidance:

- List of friendly COAs to be wargamed against specific threat COAs
- List of critical events (e.g. shifting the M.E.)
- Level of detail (e.g. two levels down)

#### Evaluation Criteria:

- Defeat of threat COAs
- Casualties
- Speed
- Success despite terrain or weather restrictions
- Other

#### Summary





- Integrate all warfighting functions at the OPT level
- Use the battlefield framework
- Focus on the decisive action and gaining an asymmetrical advantage over the enemy

